IN THE CLAIMS

1-17. (Cancelled)

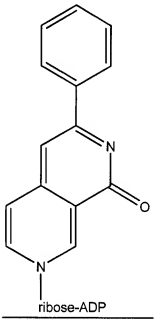
18. (Currently amended) A method of measuring activity of an NAD+ utilizing enzyme, comprising:

incubating the enzyme with NAD+ and a substrate for the enzyme;

converting any remaining NAD+ to a fluorescent compound; and

measuring an amount of fluorescence of the fluorescent compound,

wherein the fluorescent compound is compound 1:



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19. (Canceled).

20. (Original) The method of claim 18, wherein the converting comprises: mixing NAD+ with acetophenone and base, to form a mixture; and reacting the mixture with acid.

21. (Original) The method of claim 20, wherein the base is a solution of KOH.

22. (Original) The method of claim 20, wherein the acid comprises formic acid.

23. (Cancelled).

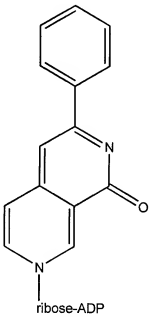
24. (Original) The method of claim 18, wherein the enzyme is PARP.

25. (Withdrawn) A method of determining whether a compound is an inhibitor of an NAD+ utilizing enzyme, comprising:

measuring activity of the enzyme by the method of claim 18, with and without the compound; and

comparing the measured activity of the enzyme with the compound and the measured activity of the enzyme without the compound.

26. (Withdrawn) The method of claim 25, wherein the fluorescent compound is compound **1**:



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27. (Withdrawn) The method of claim 25, wherein the converting comprises:

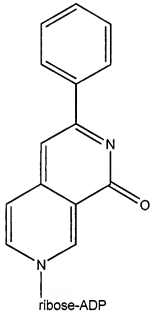
mixing NAD+ with acetophenone and base, to form a mixture; and

reacting the mixture with acid.

28. (Withdrawn) The method of claim 27, wherein the base is a solution of KOH.

29. (Withdrawn) The method of claim 27, wherein the acid comprises formic acid.

30. (Withdrawn) The method of claim 27, wherein the fluorescent compound is compound **1**:



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31. (Withdrawn) The method of claim 25, wherein the enzyme is PARP.

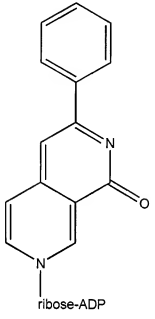
32. (Withdrawn) The method of claim 27, wherein the enzyme is PARP.

33. (Withdrawn) A method of detecting a genetic deficiency in an NAD+ utilizing enzyme in a patient, comprising:

measuring activity of the enzyme from the patient and a control enzyme, by the method of claim 18; and

comparing the measured activity of the enzyme from the patient and the measured activity of the control enzyme.

34. (Withdrawn) The method of claim 33, wherein the fluorescent compound is compound **1**:



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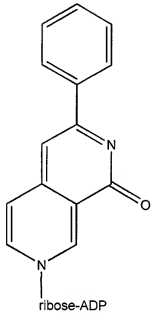
35. (Withdrawn) The method of claim 33, wherein the converting comprises: mixing NAD+ with acetophenone and base, to form a mixture; and reacting the mixture with acid.

36. (Withdrawn) The method of claim 35, wherein the base is a solution of KOH.

37. (Withdrawn) The method of claim 35, wherein the acid comprises formic acid.

38. (Withdrawn) The method of claim 35, wherein the fluorescent compound is compound **1**:



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39. (Withdrawn) The method of claim 33, wherein the NAD+ utilizing enzyme is long-chain 3-hydroxyacyl-CoA dehydrogenase.

40-53. (Cancelled)

54. (New) The method of claim 18, wherein the NAD+ utilizing enzyme is aldehyde dehydrogenase.

55. (New) The method of claim 18, wherein the converting does not cause the reaction of nicotinamide.